ALMS-creating a brighter tomorrow

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Abstract:

In today's world, huge quantity of food is being wasted on a constant basis in our homes,Hotels weddings and parties and many other places. Many individuals give food, garments and books and so forth physically by visiting better places all alone to address this emergency of yearning just as food wastage in our country. ALMS basically helps us by creating a platform for the donators to donate anything they want to. ALMS app has two kind of logins where the user needs to login as either volunteer or a donator. The new users will have to register themselves by giving basic information. Food is dropped in a e-bin where the quality is thoroughly verified. On successful donation a bill is generated. Account of donations in a day is made public such that all the app users can view how many needful are being benefited from their donations. The donators can even become volunteers and help in a good deed if they wish to by registering as Volunteers. All the achievements and pictures by the ALMS organization will be available in the about section of the app or the website. This platform will be of extraordinary benefit to keep away from any sort of food wastage and individuals can likewise go along with us as volunteers who can give food in their neighborhood. We will set up an association with NGO's who will assist us with giving the food, garments and books to one side individuals.

•INTRODUCTION

1.1 OBJECTIVE AND GOAL OF THE PROJECT

For millions of people in the developing countries,food wastage happens not only chronic poverty,conflicts and economic shocks are the reason for the hunger worldwide.Food loss also represents a waste of the very resources like land water and energy that are used to produce food. So in order to help people with hunger in order to reduce the hunger and the food wastage issue to an extent the idea of Alms.

1.2 PROBLEMSTATEMENT

Out of our research we found foodwastage is a major issue in India which is again one of the root causes of hunger. Hunger has been a major issue for ages. So this project feeds people with hunger not only people but also animals . But why should people donate? And the answer is they don't need to buy anything to donate, people can donate what is not needed for them(like in restaurants people order food and eat a little, the remains can be donated) and can gain through coupons after they donate. Not only food but also clothes, books etc. The product is being developed from a mere idea to reduce food wastage in the society and extended to accept any donation that can help the needy.

1.3 SOCIETAL IMPACT

Many homeless people on streets starve to death where on the other hand tons of food is wasted from many restaurants. We often waste lots of food unintentionally sometimes. Though we want to do something with it like feeding the needy or the street animal's situations may not be very feasible for everyone of us. The basic idea of making use of the food and unwanted stuff which might actually be useful to other people in need has given birth to a platform called "ALMS" an applications is an attempt to solve the above problem.

II.LITERATURESURVEY

1.Mobile Application for Excess Food and Analysis (2018) R.Adline Freeda1 , M.S.Sahlin Ahamed.
In the base paper, a computerization is worked with four modules which centers on amount of food being wasted, it is centered around making a mindfulness by taking care of the live information on how much food is being wasted, it utilizes a data set to store the amount of food being wasted every day and later the introduced information is addressed in charts in request to urge the understudies to lessen the wastage of food.

2. GET A BITE: The Charity-based application through which people can donate food, books and clothes to needy people(2020). Shubham Singh Rana satvik Maheswari.
In order to help we develop anonline application that will give a stage to individuals to give their extras alongside books and garments,.In this framework principally there are four modules which are administrator,Ngo's,volunteers and outsiders enlisted to the administrator like the client, lodgings, cafés, and so forth any individual or an association attempting to give food through this application will make another solicitation to the administrator and the administrator will allow the solicitation at whatever point it can.

3. Review on Literature Survey Share My Food Application(2020). Sachin Muttagi , Gurukiran Badiger , Avinash , Dr. S. R Biradar.
This study examined the applications region, methods, works and their situation in the food wastage the executive progressive system. In view of our discoveries,there is an extraordinary inconsistency between client center and the focal point of food squander the executives applications.
Additionally, there has been little exploration on client conduct and involvement in food squander the executives applications, particularly on client commitment with the application. This perception shows the need to fuse strategies that moveclient center past food waste the executives and make a feeling of having a place and to harmonies the waste administration through a bunch of activities.

4.Food donation: An initiative to mitigate hunger in the world(2015). Gonzalo Mejia.
Countless huge loads of foodare either lost or wasted while a huge number of individuals experience the ill effects of ailing health. A conceivable drive are the food banks in which huge corporate store and possibly different associations can give food. This food is gathered and conveyed by food banks to individuals in need. Then again, food banks have additionally their own concerns: Poor appropriation methodologies, casualness in dealing with and conveying food, absence of framework, the crisscross between the inventory and sustenance needs, among others. A Public approaches that energize the gift of food too methodologies to diminish the shopper mentalities towards food wasted can be executed without significant ventures.

III. Requirements Specification

Hardware Requirements

ELEMENTS USED IN THE CIRCUIT PREPARATION.

i)LM358 op-Amp :- Wide supply ranges, low supply current drain, supply voltage independence, and a large unity gain bandwidth are among these qualities.

ii)5V relay:- We utilised a +5V DC supply to one end of the coil and a switch to ground the other end because the relay has a 5V trigger voltage.33 k ohm , 68 k ohm, 100 k ohm, 560 ohm, 220 ohm

iii)2n22 transistor:- A transistor is a semiconductor device that can conduct as well as insulate electrical current or voltage. A transistor is a switch and an amplifier in one.

iv)10K potentiometer:- When a potentiometer is connected in a circuit and the null point is reached, it draws no current. As a result, it determines the cell's e.m.f. A potentiometer can be used to accurately measure extremely small p.d. that a voltmeter cannot measure. Using a very long wire and a very slight potential gradient, this can be accomplished.

v) 1n4007 diode:- Diodes aid in the execution of digital logic. They're used to isolate signals from a power source.

vi)100 pf capacitor:- In a DC circuit, the capacitor operates as an open switch once it has been charged with the applied voltage.

viii)555 IC Transmitter and receiver:- for transmitting and receiving the signals

ix)(IR sensor):- for sensing the objects coming near the bin to donate or disperse.

x)Servo motor 5V:- A rotary actuator or linear actuator is a servo motor. It enables accurate angular or linear position, velocity, and acceleration control. It is made of an appropriate motor and a position feedback sensor.

xi)9v or 5v power supply:- for the working of the circuit.

Software Requirements

Platforms:Flutter,Android studio.
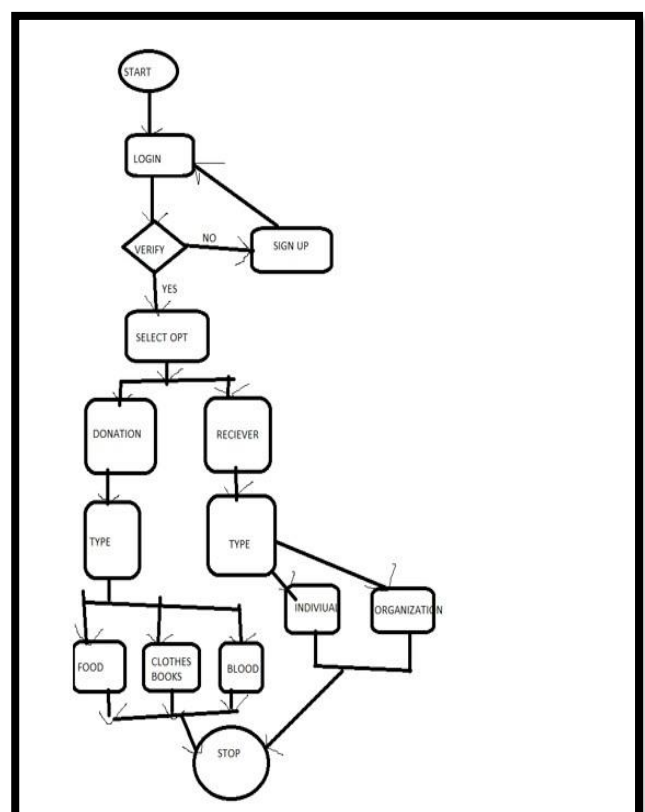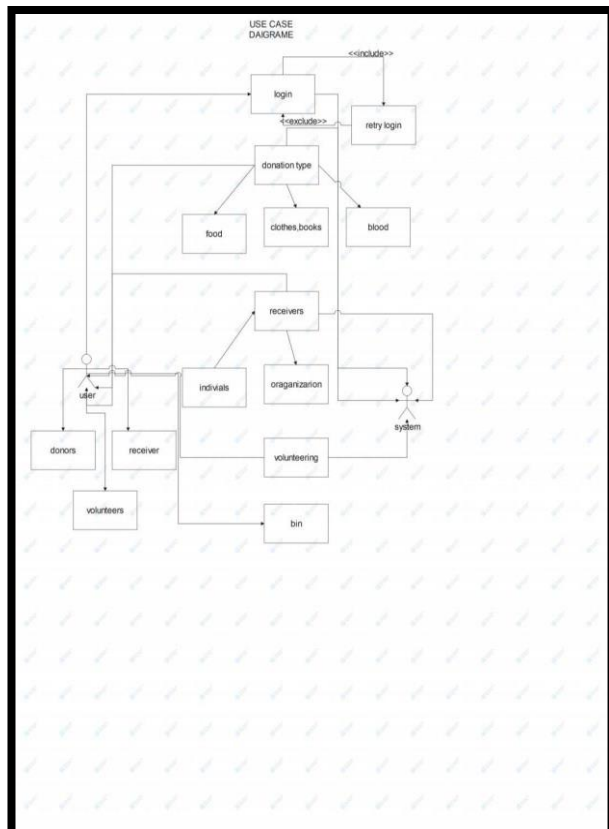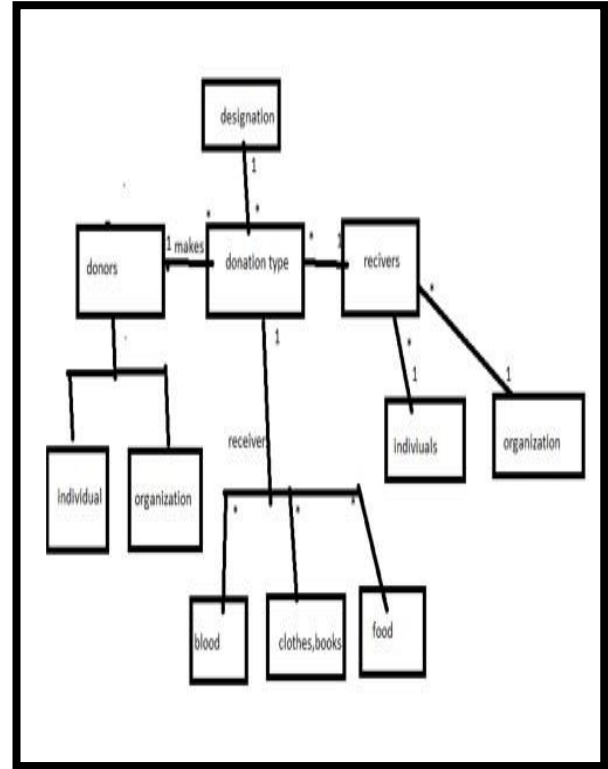Language:html,java,php,mysql.
Database:Mysql.

IV. System Design

UML Class Diagram

USE CASE DIAGRAME

This is the circuit made using the above listed tools and the center part of the bin is the relay which helps the bin to open the lid.
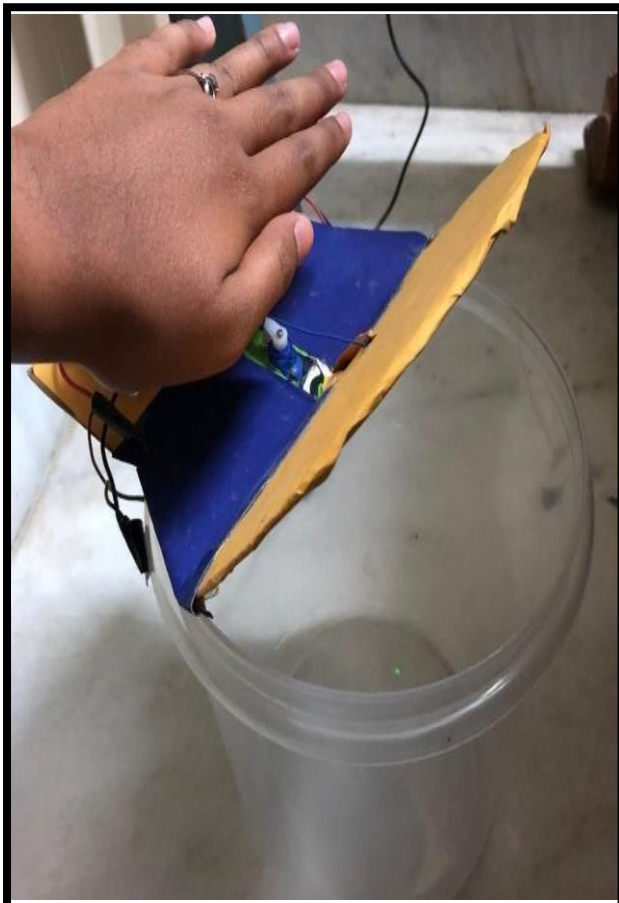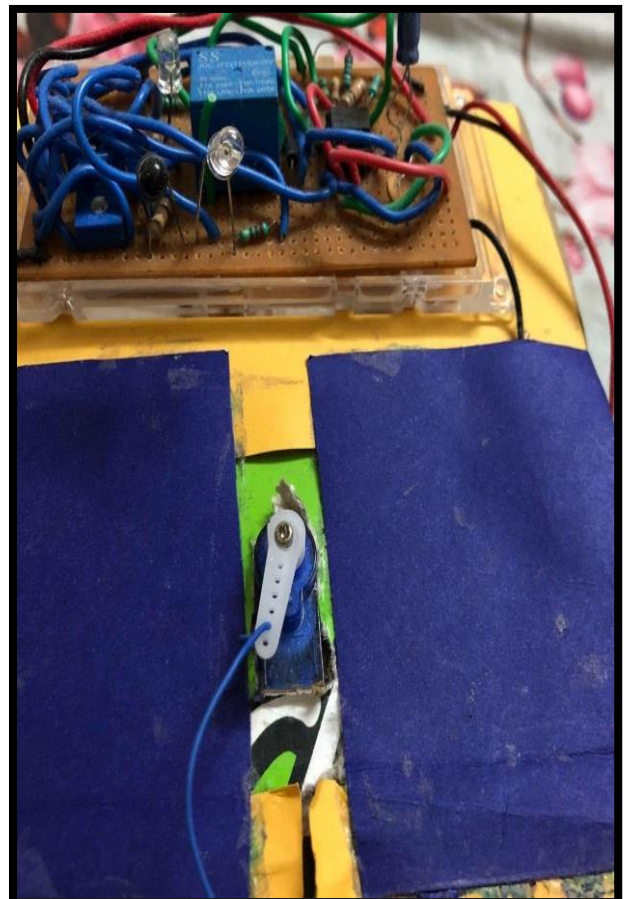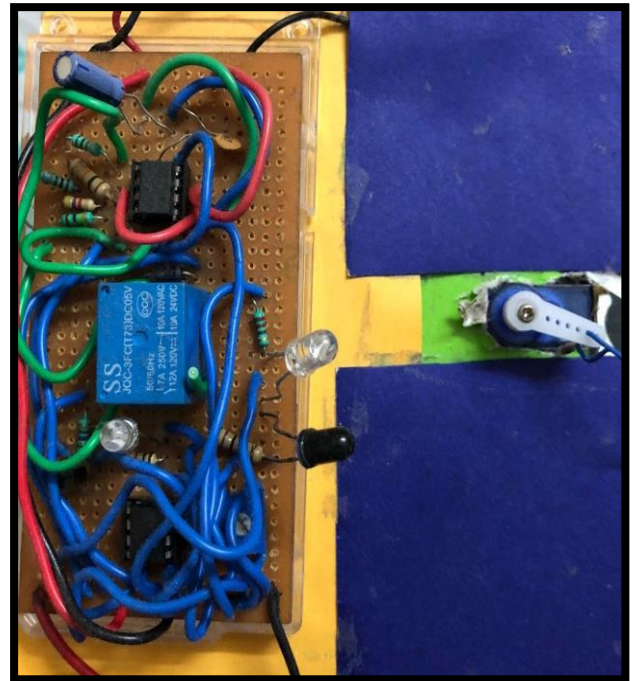
V.Implementation of System

Alms stations consists of two sensor boxes where in one user can put food and the other for clothes and books.This station also has a volunteer and follows all the covid protocols and the cover used to donate will not be throwed they will be cleaned and reused.the user can check for the nearby stations through the alms app interface and can donate, any needy person can take the food form the box. In order to use the app services the user need to signup and then login and check for nearby alms stations and can go donate also the user in our app can view the nearby blood donation centers too so in emergency it can be useful for alms users and there's also option in alms app called volunteer so if user wants to volunteer the user has to enter the necessary details and no of hours the user can work and location where he/she wants to work in and they will be certified if they work for certain period of hours in total. the user's like orphanages if they want some clothes or books for the children they can login and view the books and clothes available and can order them with proper proofs and details and can collect them from the nearby station. And if the donated food remains at the end the day that food will be fed to the animals and to the needy by the volunteers.
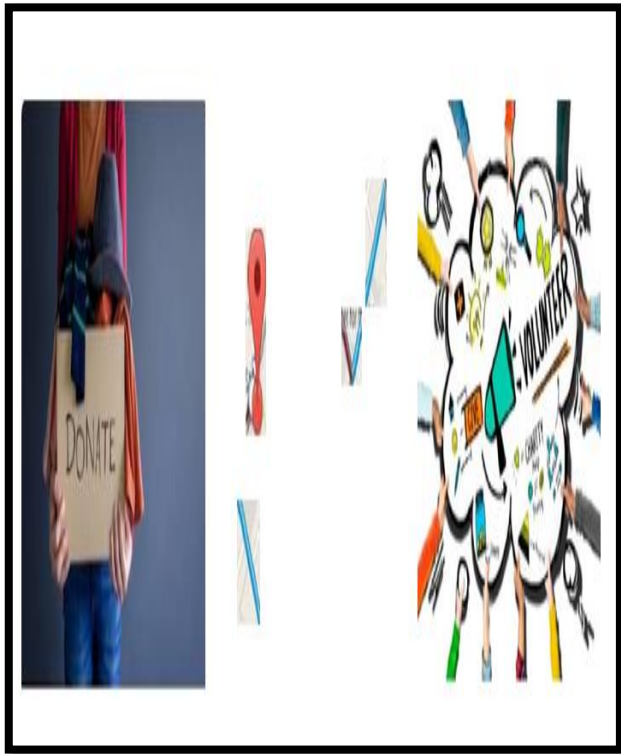
MODEL OF THE BIN:-

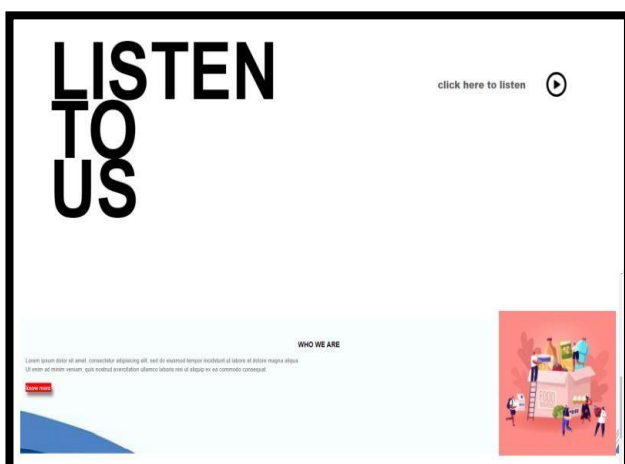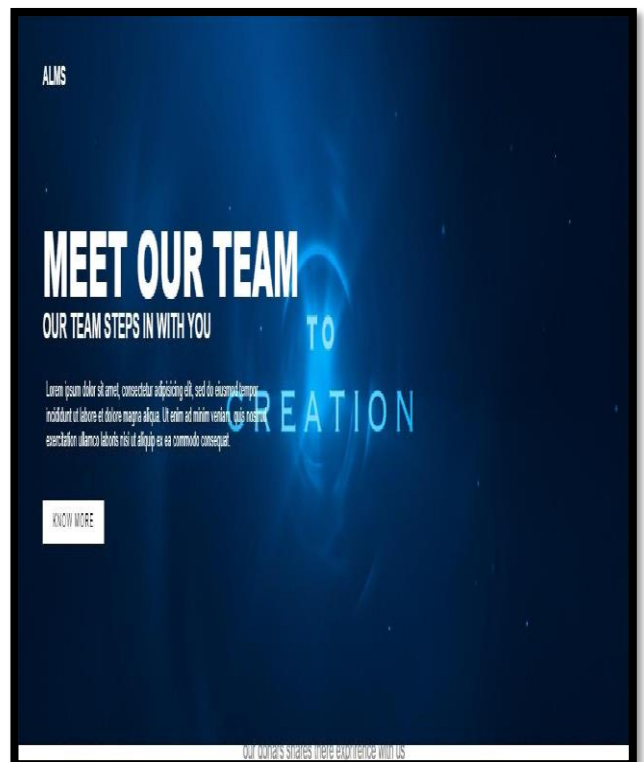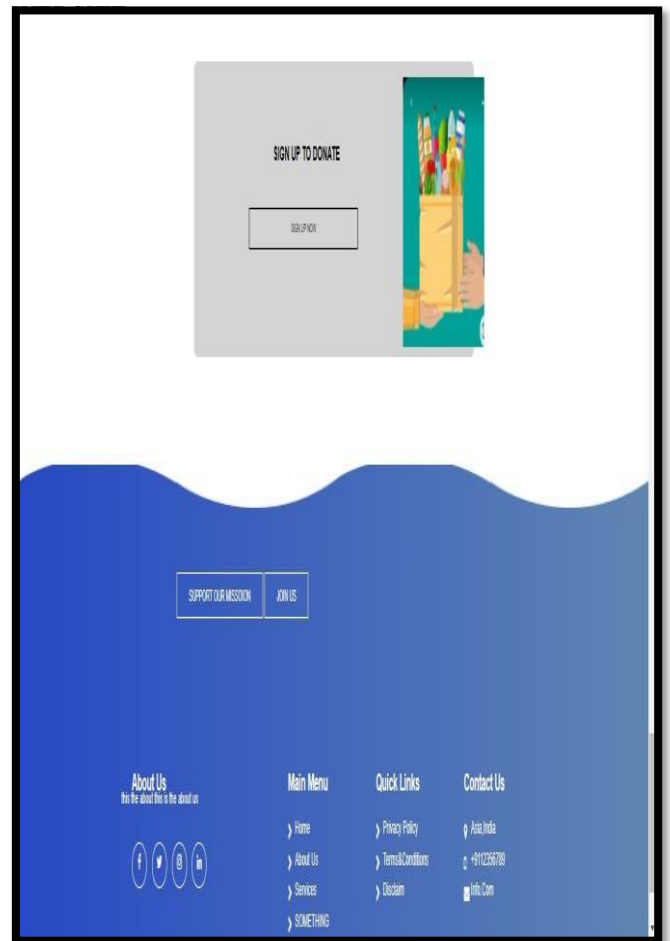When any object or human hand comes near the sensor the cap of the bin opens enabling the humans to use it.

WEBSITE AND APP DESIGN / USER INTERFACE:

REGISTER AT ALMS:

Register Here..
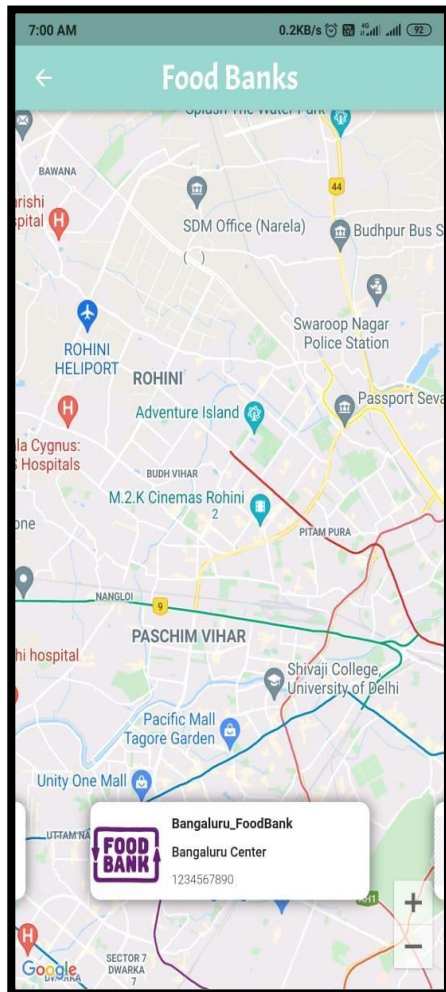
Enter your Email ✉

Enter your Password 👁

Sign Up

Enter your Email ✉

Enter your Password 🔑

Log In

New here? **Sign up**

Organizations

○ Rise and Shine

○ The Youngsters

○ The DevelopingYouth

○ Reach For The Stars

○ Shiksha

○ Educate The Country

○ Academy Center

○ Learnology

○ Education For All

○ Quest Kids

Food Banks

Bangaluru_FoodBank
Bangaluru Center
1234567890

vi) Results and Discussion

The project alms has been designed to feed the people who are in need of food and are thriving for food but could not eat because of lack of money and etc.so the needy can anytime from alms stations can take the food and eat. The person who has extra food and don't want to waste it can put the packed food in the alms bin and hence the needy can take the food and eat.
Hence the aim to feed the hungry people has been fulfilled this has achieved on designing a website and a hardware component and an app for the users using the basic technologies and within a very low budget. the designed website or app has a very user friendly interface and is easy to use.

Conclusion and Future Work

If the projects succeeds and the aim of the project is been properly met then We want to design a better version for the hardware which includes proper automatic packing of food and better user interface for the app and website and also want to include a feature that connects the alms stations to the nearby restaurants in order to take the order for remained food at the end of the day and with the help of volunteers distribute the food to street dogs, and hungry people,also want to include a new feature to the hardware to keep the food in the box fresh for a very long time.

viii)References

[1]http://www.ijirset.com/upload/2018/n3cit/13_CONFERENCE%2030.pdf
[2]https://www.xajzkjdx.cn/gallery/383-april2020.pdf
[3]https://www.ijert.org/review-on-literature-survey-share-my-food-application
[4]https://www.researchgate.net/publication/284726800_Food_donation_An_initiative_to_mitigate_hunger_in_the_world
[5]https://ieeexplore.ieee.org/abstract/document/9375945
[6]https://electronicbazaar.com.au/the-smart-dustbin-without-arduino-or-programming-electronics- project-2/
[7]http://ijarece.org/wpcontent/uploads/2016/06/IJARECE-VOL-5-ISSUE-5-1576-1578.pdf